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SITE ASSESSMENT SECTION

Screening Site Inspection
Site Specific Implementation Plan

for

Decatur Barding & Spawr Landfill

USEPA ID No. ILD 984766378

BVWST Project No. 70770

December 8, 1992

Sampling

PA Score = 59

For B&V Waste Science and Technology Corp.

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GW02 per
telephone
discussion*

For Illinois Environmental Protection Agency

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Contents

1.0	Introduction	1
1.1	Confidentiality	1
1.2	Preparation	1
1.3	Objectives	1
1.4	Quality Assurance/Quality Control	1
2.0	Site History	2
2.1	Site Operations	2
2.2	Storage/Disposal Methods	2
2.3	Areas of Concern	2
2.4	Current Status	2
3.0	Reconnaissance Findings and Observations	5
4.0	Justification for an SSI	7
4.1	Supporting Information	7
4.2	Pathways Threatened	7
4.3	Populations/Environments Potentially Affected	7
5.0	Proposed Sampling Plan	8
5.1	Soil	8
5.2	Sediment	8
5.3	Leachate	8
5.4	Groundwater	8
6.0	Work Summary	10
7.0	Estimate of Level of Effort	11
8.0	Projected Schedule of Milestones	12
	References	13

Figures

Figure 1	Site Location Map	3
Figure 2	Site Sketch	4
Figure 3	Proposed Sample Locations	9

1.0 Introduction

1.1 Confidentiality

THIS DOCUMENT IS CONFIDENTIAL. It contains predecisional information that is not to be released without the approval of the U.S. Environmental Protection Agency (USEPA).

1.2 Preparation

The Alternative Remedial Contracting Strategy (ARCS) V contractor, B&V Waste Science and Technology Corp. (BVWST), prepared this site specific implementation plan (SSIP) for the USEPA under ARCS contract 68-W8-0064.

1.3 Objectives

This SSIP has three objectives:

1. Determine CERCLA eligibility.
2. Document the presence, quantity, and type, or absence of, uncontained or uncontrolled hazardous substances onsite.
3. Determine area and site characteristics.

1.4 Quality Assurance/Quality Control

The *Quality Assurance Project Plan for Region V Superfund Site Assessment Program*, dated September 27, 1991, documents QA/QC protocol for site inspection activities unless otherwise stated.

2.0 Site History

2.1 Site Operations

The Decatur Barding and Spawr Landfill site (B & S Landfill) was used for disposal of municipal and industrial wastes. The landfill operated from the mid-1950s until about 1970. A few acres of the site are used by Standard Waste, a recycling and waste hauling firm. Figure 1 is a site location map. Figure 2 is a site layout.

2.2 Storage/Disposal Methods

The site was used to landfill solid waste from the city of Decatur and area industries. Operations allegedly included disposal of liquids in a pit onsite. Site operators were unavailable to answer questions about daily operations.

2.3 Areas of Concern

B&S Landfill has three areas of concern: surface soil, surface water, and groundwater. Surface soil with exposed refuse, leachate runs, and liquid wastes presents a direct contact hazard.

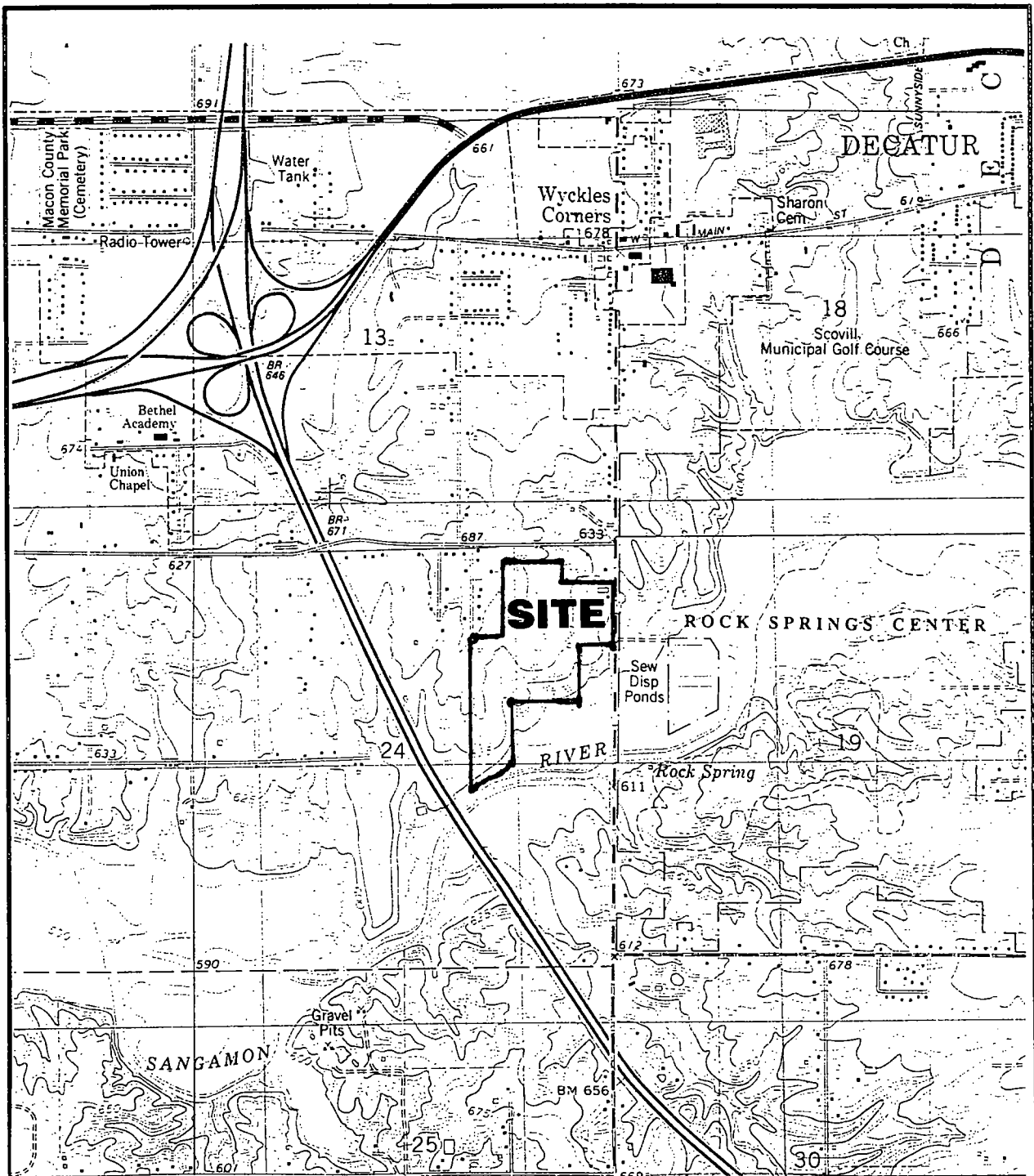
The Sangamon River receives site runoff that may contaminate sensitive environments. Leachate may also flow way to the river. IEPA analyzed the leachate. It contained benzene, chlorobenzene and tetrachloroethylene.

Precipitation may become contaminated as it percolates through the landfill to the groundwater zone.

Monitoring wells on the neighboring sanitary district property were sampled by IEPA and found to contain benzene, chlorobenzene, tetrahydrofuran, and benzothiazolone.

2.4 Current Status

The landfill is inactive. Standard Waste, a recycling and waste hauling firm, operates on about three acres of the site.



Source: USGS, 1982

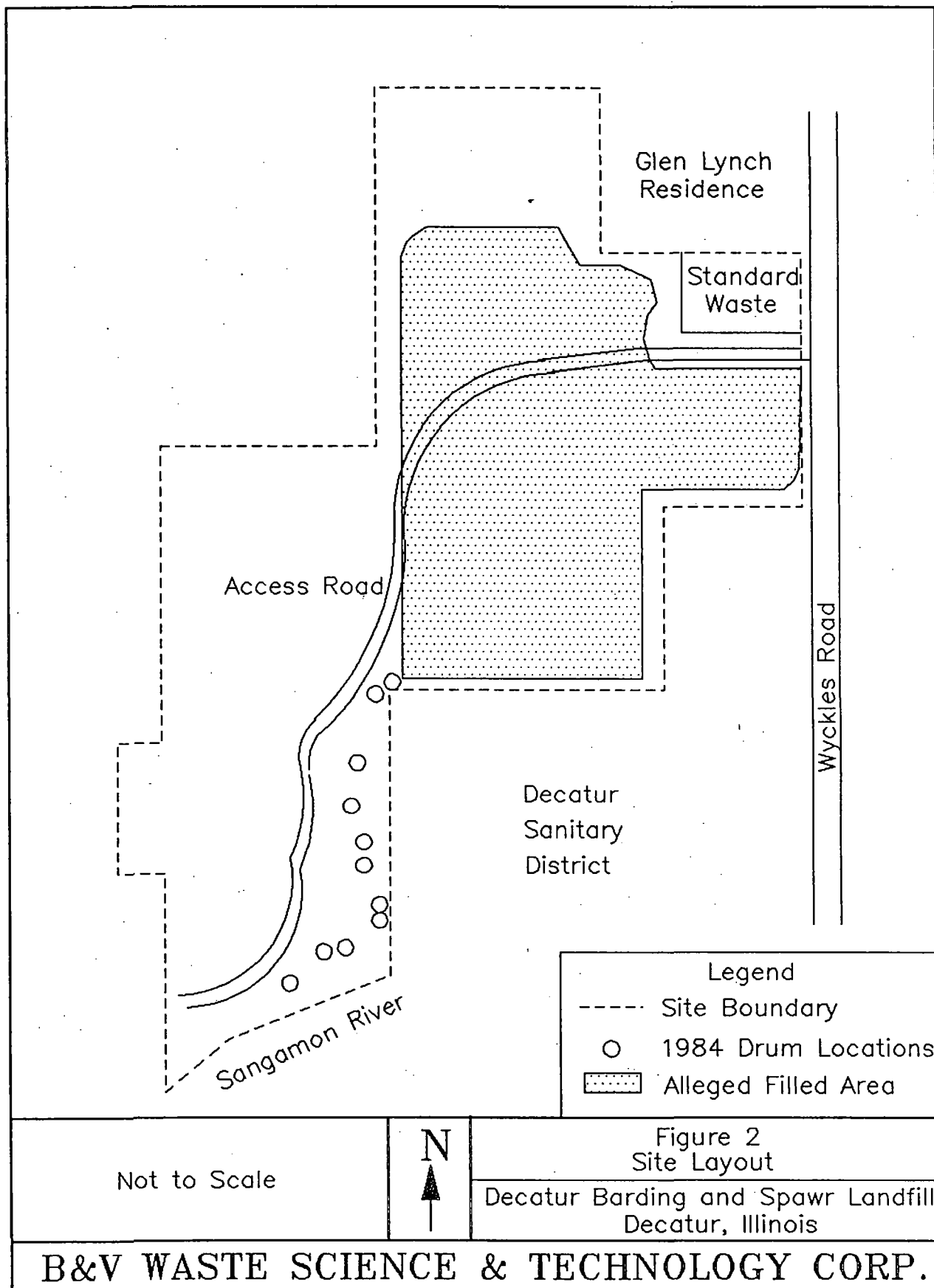
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Figure 1
Site Location Map

Decatur Barding & Spawr Landfill
Decatur, Illinois

B&V Waste Science and Technology Corp.



3.0 Reconnaissance Findings and Observations

The ARCS contractor conducted a site screening inspection reconnaissance at the B&S Landfill site on August 26, 1992. The weather was partly cloudy; the temperature was about ninety-five degrees. James Spawr and Lavone Barding, the site owner, were present and answered questions during the reconnaissance.

Lavone Barding owns most of B&S Landfill. She obtained the property in 1962 upon the death of her husband, Junior Lewis Barding. Junior Lewis Barding owned the site during landfill operations. At the time of Mr. Barding's death, two acres of the 66-acre site were split off and given to his sons, James Spawr and Junior L. Barding Jr. The sons began a construction firm on their two acres in 1962. Recently, the sons abandoned an attempt to purchase the balance of the site.

The deceased J. L. Barding obtained the property in the mid 1950s. Spawr stated his father leased the site to the Macon County Landfill Corporation (MCLC) from the 1950s to the middle or late 1960s. MCLC, formed by several trash haulers, used the site for landfilling industrial and municipal wastes. According to an Illinois Environmental Protection Agency (IEPA) preliminary assessment (PA), landfilling ceased in 1971. The Barding sons operated their construction firm onsite until 1980, when they opened Standard Waste. Standard Waste operations include collecting recyclables and servicing several garbage collection routes.

B&S Landfill occupies about sixty-six acres in a rural area near Decatur, Illinois, an industrialized city with a population of 84,000. The site is bordered on the north by residences, on the west by US Route 51 and the Macon County Landfill, on the south by the Sangamon River, and on the east by Wyckles Road and the Sanitary District of Decatur Sludge Lagoon Facility. Across Wyckles Road is the Macon County Conservation District Rock Springs Center for Environmental Discovery. The nearest school, Dennis School, is about one and a half miles northeast of the site.

Access to the property is uncontrolled. Main site access is a gravel road near the northern end of the site off of Wyckles Road. This gravel road was used by

haulers during landfilling operations. Each hauler stopped at an attended guard shack, to record the load. A second road (dirt) enters the northwestern portion of the site from a residential subdivision, and a third road (dirt) enters the southern part of the site near the river. No gates are present across the roads. A four-strand barbed wire fence surrounds about two thirds of the site; the rest of the site is unfenced. Vehicle tracks were observed in the mud near the river's edge. Spawr said the tracks were from teenagers driving four-wheelers in the area.

The site topography is sloping and irregular. The lowest elevation is the southern border at the Sangamon River. Much of the site drains there. The land slopes down to the southeast north of the sanitary district property. Ditches are present along Wyckles Road to convey drainage south to the river.

A private well is in use at Standard Waste. Nearby homes also use private wells.

When site operations began, B&S Landfill may have been the only operating landfill in the area. It is likely that both industrial and municipal wastes were disposed of there. Liquid wastes were allegedly dumped in an onsite pit by several industries. Spawr could not provide information about liners, cover materials, or daily operating practices used at the landfill.

As a result of a 1984 PA, IEPA reported that 19 drums were present onsite near the eastern property line. Spawr stated he did not accompany IEPA representatives during their visit and was unaware drums had been found. Drums were not present in the alleged location at the time of reconnaissance. Two leachate flows were also reported north and west of the sanitary district property on two separate IEPA visits. Liquid flow was observed in this area during the reconnaissance, but its source could not be determined.

4.0 Justification for an SSI

4.1 Supporting Information

Site history supports the need to conduct an SSI. Several actions by regulators have taken place onsite. On April 11, 1984, IEPA conducted a site inspection and found uncovered garbage, leachate, and 19 drums. The IEPA report includes many photographs of these conditions.

In April 1987, IEPA collected leachate and monitoring well samples that contained hazardous constituents; however, samples from drums were not mentioned in the IEPA report. A drum removal probably occurred.

In January 1989, another IEPA inspection confirmed uncovered refuse and leachate were still present. Again, drums were not mentioned.

During the reconnaissance, James Spawr stated he had never heard of drums being found onsite, but the IEPA has several photographs of them.

The landfill was operated before RCRA regulations were instituted to prevent disposal of hazardous wastes.

The presence of exposed refuse, leachate, and drums, as well as placement before regulations supports the need for conducting an SSI.

4.2 Pathways Threatened

Three pathways are potentially threatened by site conditions: soil, surface water, and groundwater.

4.3 Populations/Environments Potentially Affected

Populations and environments are potentially affected by the site because they may come into contact with refuse, leachate, or contaminated soils.

Residential populations using private wells may be affected by releases from the site. The Sangamon River environment may receive released substances by surface water runoff.

5.0 Proposed Sampling Plan

This section discusses the proposed sampling plan and rationale. All samples will be analyzed for target compound list (TCL) and target analyte list (TAL) constituents under a routine analytical services (RAS) request. Figure 3 shows proposed locations for samples of each medium discussed below.

5.1 Soil

Four surface soil (SS) samples will be taken where refuse is exposed or where exposed refuse was documented during the PA. Specific locations will be chosen during the sampling outing. A fifth background sample will be taken from a location outside the influence of landfill operations.

5.2 Sediment

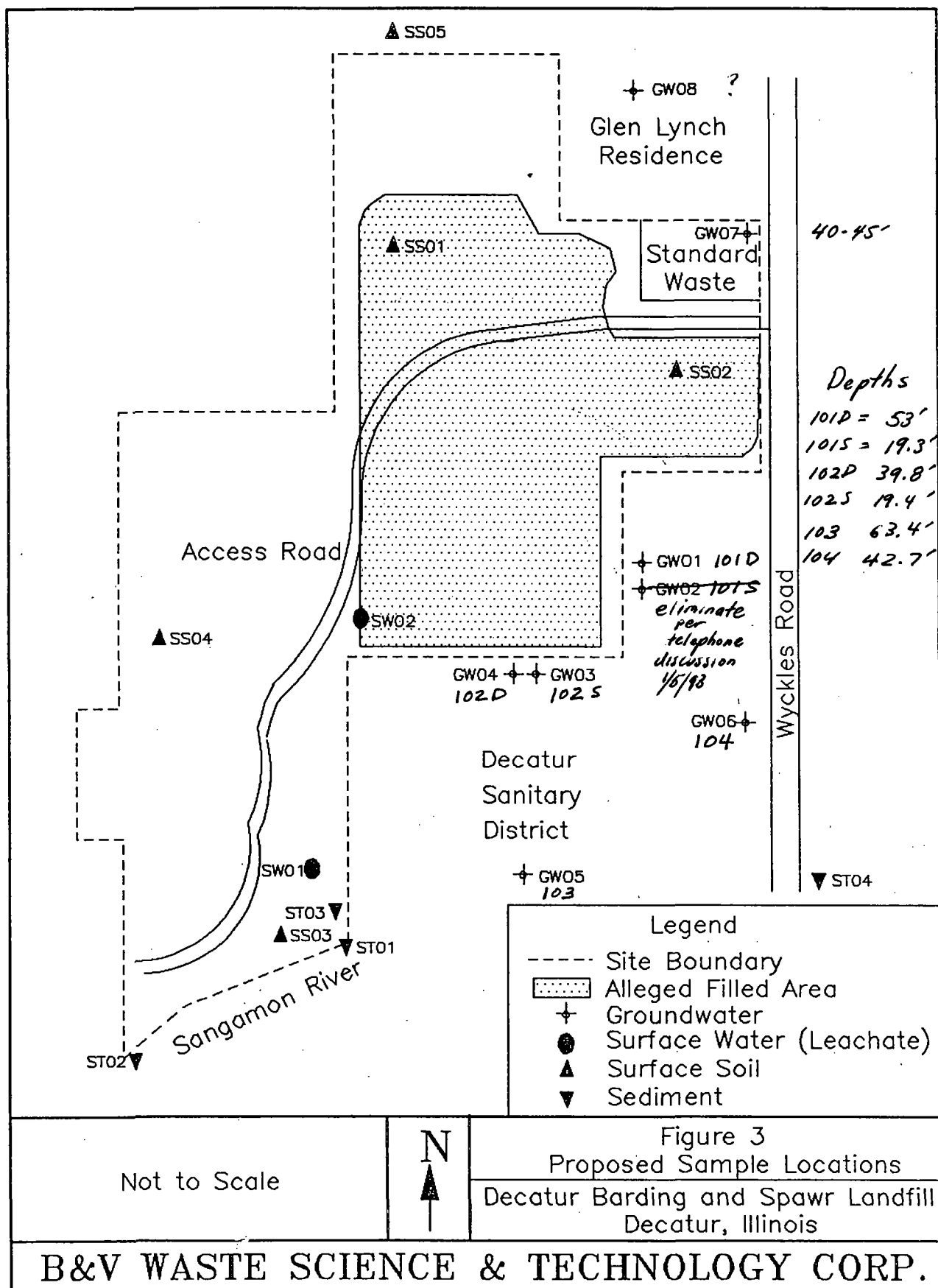
A total of four sediment (ST) samples will be taken. Two samples will be taken on the north bank of the Sangamon River, one near the east property line and the other near the river, by the west site boundary. A third sample will be taken in the well-defined drainage ditch flowing into the river. The fourth sample (background) will be collected upgradient from the site.

5.3 Leachate

If leachate is present, surface water (SW) samples will be taken to determine if it contains hazardous constituents.

5.4 Groundwater

Groundwater (GW) will be taken from the monitoring wells at the adjacent Sanitary District property. Also, samples will be taken from Standard Waste's well and from the well at the Lynch residence north of the site. The Lynch well sample will be the background for the groundwater.



6.0 Work Summary

The following specific activities will be completed during the SSI:

1. Interview site owner(s) representative(s).
2. Photograph site and surrounding area.
3. Screen site with detection devices for substance occurrence and safety information.
4. Collect environmental samples.
5. Dispose of investigative derived waste.

SSI investigators will follow the health and safety protocol detailed in the site health and safety plan (HASP). Workers will be adequately protected during each activity using these anticipated levels of personal protective equipment (PPE):

Activity *	Anticipated Level
1	D
2	D
3	D
4	D
5	D

* When performing the indicated activity, the field team will be prepared to advance to the next level of personal protection above that listed.

7.0 Estimate of LOE Hours

1. Estimated level of effort (LOE):

Activity	LOE Hours
Pre-Field Work	100
Travel	16
Field Work	118
Post-Field Work	30
Report Preparation	152
Total	416

2. Number of field team members:
Reconnaissance team--two persons.
Field sampling team--four persons.
3. Number of days for field work (actual onsite activities):
Reconnaissance/interview--one day.
Sampling--two-and-one-half days.

8.0 Projected Schedule of Milestones

Milestone	Begin	Complete
Pre-Field Work	August 8, 1992	December 15, 1992
Travel/Field Work	January 11, 1993	January 14, 1993
Post-Field Work	January 15, 1993	January 29, 1993
Report Preparation	February 1, 1992	June 18, 1993

References

Illinois Environmental Protection Agency, "CERCLA Preliminary Assessment Report, Decatur/Barding Landfill, ILD 984766378," February 3, 1989.

USGS Topographic Maps, Harristown and Decatur Quadrangles, 1982.

PA-Score 2.1 Scoresheets
Decatur Barding and Spawr Landfill - 12/22/92

Page: 1

OMB Approval Number: 2050-0095
 Approved for Use Through: 4/95

POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT FORM				IDENTIFICATION	
				State: IL	CERCLIS Number: 984766378
				CERCLIS Discovery Date: 4-11-84	
1. General Site Information					
Name: Decatur Barding and Spawr Landfill			Street Address: Wyckles Road		
City: Decatur	State: IL	Zip Code: 62526	County: Macon	Co. Code: 115	Cong. Dist: 18
Latitude: Longitude: 39° 49' 30.0" 89° 1' 50.0"		Approx. Area of Site: 66 acres		Status of Site: Inactive	
2. Owner/Operator Information					
Owner: Lavone Barding			Operator: James Spawr and Junior Barding		
Street Address: 2271 West Center			Street Address: 965 South Wyckles Road		
City: Decatur			City: Decatur		
State: IL	Zip Code: 62526	Telephone: 217-429-1818	State: IL	Zip Code: 62526	Telephone: 217-429-0020
Type of Ownership: Private			How Initially Identified: Not Specified		

POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT FORM		IDENTIFICATION	
		State: IL	CERCLIS Number: 984766378
		CERCLIS Discovery Date: 4-11-84	
3. Site Evaluator Information			
Name of Evaluator: Ramona Reints		Agency/Organization: BVWST	Date Prepared: 11-13-92
Street Address: 101 North Wacker Drive, Suite 1100		City: Chicago	State: IL
Name of EPA or State Agency Contact: Alan Altur		Telephone: 312-886-0390	
Street Address: 77 West Jackson		City: Chicago	State: IL
4. Site Disposition (for EPA use only)			
Emergency Response/Removal Assessment Recommendation: No	CERCLIS Recommendation: Higher Priority SI	Signature:	
Date:	Date:	Name:	
		Position:	

POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT FORM	IDENTIFICATION	
	State: IL	CERCLIS Number: 984766378
	CERCLIS Discovery Date: 4-11-84	

5. General Site Characteristics

Predominant Land Uses Within 1 Mile of Site: Residential Forest/Fields	Site Setting: Suburban	Years of Operation: Beginning Year: 1956 Ending Year: 1970
Type of Site Operations: Municipal Landfill	Waste Generated: Offsite	
	Waste Deposition Authorized By: Present Owner	
	Waste Accessible to the Public Yes	
	Distance to Nearest Dwelling, School, or Workplace: 0 Feet	

6. Waste Characteristics Information

Source Type Quantity Tier Landfill 3.00e+01 acres A Surface impoundment 4.00e+02 sq ft A	General Types of Waste: Organics Solvents Oily Waste Other: unknown wastes
Tier Legend C = Constituent W = Wastestream V = Volume A = Area	Physical State of Waste as Deposited Solid Liquid

PA-Score 2.1 Scoresheets
Decatur Barding and Spawr Landfill - 12/22/92

Page: 4

POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT FORM		IDENTIFICATION	
		State: IL	CERCLIS Number: 984766378
		CERCLIS Discovery Date: 4-11-84	
7. Ground Water Pathway			
Is Ground Water Used for Drinking Water Within 4 Miles: No	Is There a Suspected Release to Ground Water: Yes	List Secondary Target Population Served by Ground Water Withdrawn From:	
Type of Ground Water Wells Within 4 Miles: Private	Have Primary Target Drinking Water Wells Been Identified: No	0 - 1/4 Mile 23 >1/4 - 1/2 Mile 46 >1/2 - 1 Mile 60 >1 - 2 Miles 160 >2 - 3 Miles 400 >3 - 4 Miles 800 Total 1489	
Depth to Shallowest Aquifer: 40 Feet	Nearest Designated Wellhead Protection Area: None within 4 Miles		
Karst Terrain/Aquifer Present: No			

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Decatur Barding and Spawr Landfill - 12/22/92

Page: 5

POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT FORM	IDENTIFICATION	
	State: IL	CERCLIS Number: 984766378
	CERCLIS Discovery Date: 4-11-84	

8. Surface Water Pathway

Part 1 of 4

Type of Surface Water Draining Site and 15 Miles Downstream: River	Shortest Overland Distance From Any Source to Surface Water: 0 Feet 0.0 Miles
Is there a Suspected Release to Surface Water: Yes	Site is Located in: Annual - 10 yr floodplain

8. Surface Water Pathway

Part 2 of 4

Drinking Water Intakes Along the Surface Water Migration Path: No Have Primary Target Drinking Water Intakes Been Identified: No Secondary Target Drinking Water Intakes: None

PA-Score 2.1 Scoresheets
Decatur Barding and Spawr Landfill - 12/22/92

Page: 6

POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT FORM	IDENTIFICATION	
	State: IL	CERCLIS Number: 984766378
	CERCLIS Discovery Date: 4-11-84	

8. Surface Water Pathway	Part 3 of 4
Fisheries Located Along the Surface Water Migration Path: Yes Have Primary Target Fisheries Been Identified: Yes Secondary Target Fisheries: None	

8. Surface Water Pathway	Part 4 of 4
Wetlands Located Along the Surface Water Migration Path? (y/n) Yes Have Primary Target Wetlands Been Identified? (y/n) Yes Secondary Target Wetlands: None	
Other Sensitive Environments Along the Surface Water Migration Path: Yes Have Primary Target Sensitive Environments Been Identified: Yes Secondary Target Sensitive Environments: None	

POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT FORM	IDENTIFICATION	
	State: IL	CERCLIS Number: 984766378
	CERCLIS Discovery Date: 4-11-84	

9. Soil Exposure Pathway

Are People Occupying Residences or
Attending School or Daycare on or
Within 200 Feet of Areas of Known
or Suspected Contamination: Yes
Total Resident Population: 23

Number of Workers Onsite: None

Have Terrestrial Sensitive Environments Been Identified on or Within
200 Feet of Areas of Known or Suspected Contamination: No

10. Air Pathway

Total Population on or Within:	
Onsite	5
0 - 1/4 Mile	23
>1/4 - 1/2 Mile	115
>1/2 - 1 Mile	600
>1 - 2 Miles	1200
>2 - 3 Miles	6000
>3 - 4 Miles	50000
Total	57943

Is There a Suspected Release to Air: No

Wetlands Located
Within 4 Miles of the Site: Yes

Other Sensitive Environments Located
Within 4 Miles of the Site: Yes

Sensitive Environments Within 1/2 Mile of the Site:

Distance	Sensitive Environment Type/Wetlands Area(acres)
Onsite	Wetlands (1 to 50 acres)
0 - 1/4	National Preserve
0 - 1/4	Wetlands (>50 to 100 acres)

PA-Score

PA SCORESHEETS

Site Name: Decatur Barding and Spawr Landfill
CERCLIS ID No.: 984766378
Street Address: Wyckles Road
City/State/Zip: Decatur, IL 62526

Investigator: Ramona Reints
Agency/Organization: BVWST
Street Address: 101 North Wacker Drive, Suite 1100
City/State: Chicago, IL

Date: 11-13-92

WASTE CHARACTERISTICS

Waste Characteristics (WC) Calculations:

1 Municipal Waste Landfill Ref: 1 WQ value maximum
Volume 1.44E+07 cu ft 2.13E+02
acres times cu feet per acre

Area 3.00E+01 acres 3.85E+02 3.85E+02
The area for the site is about sixty-five acres. The Preliminary Assessment indicates about 33 acres were landfilled. Assuming the filling occurred to a depth of ten feet, and 43,560 square feet are in an acre, 14,374,800 cubic feet of waste are present.
Ref: 1

2 Waste Pit Surface impoundment Ref: 1 WQ value maximum

Volume 2.00E+03 cu ft 2.96E+01
The IEPA Preliminary Assessment indicates a waste pit was used for disposing liquid industrial wastes. No information is given about its dimensions. Assume a twenty by twenty foot area five feet deep. The volume of liquid waste would be 2000 cubic feet.
Ref: 1

Area 4.00E+02 sq ft 3.08E+01 3.08E+01
The IEPA Preliminary Assessment refers to a waste pit that was used to dispose of liquid industrial waste. No other information is given about the pit. Assume it is twenty by twenty feet and five feet deep. The square footage used is four hundred square feet and the volume of waste that could be contained in a five foot deep area is 2000 cubic feet times 7.48 gallons per cubic foot equals 14,960 gallons.
Ref: 1

WQ total 4.15E+02

** Only First WC Page Is Printed **

Waste Characteristics Score: WC = 32

Ground Water Pathway Criteria List
Suspected Release

Are sources poorly contained? (y/n/u)	Y
Is the source a type likely to contribute to ground water contamination (e.g., wet lagoon)? (y/n/u)	Y
Is waste quantity particularly large? (y/n/u)	Y
Is precipitation heavy? (y/n/u)	N
Is the infiltration rate high? (y/n/u)	U
Is the site located in an area of karst terrain? (y/n)	N
Is the subsurface highly permeable or conductive? (y/n/u)	U
Is drinking water drawn from a shallow aquifer? (y/n/u)	U
Are suspected contaminants highly mobile in ground water? (y/n/u)	U
Does analytical or circumstantial evidence suggest ground water contamination? (y/n/u)	Y

Other criteria? (y/n) Y

SUSPECTED RELEASE? (y/n) Y

Summarize the rationale for Suspected Release:

A release to groundwater is suspected. There are no monitor wells onsite, however, there are monitor wells on the neighboring sanitary district property. Compounds detected in the monitor wells include chlorobenzene, benzene, benzothiazolone and tetrahydrofuran. There is no documentation on liners, containment features, or leachate collection systems. It is assumed there are none.

Ref: 1

Ground Water Pathway Criteria List
Primary Targets

Is any drinking water well nearby? (y/n/u)	Y
Has any nearby drinking water well been closed? (y/n/u)	U
Has any nearby drinking water well user reported foul-testing or foul-smelling water? (y/n/u)	U
Does any nearby well have a large drawdown/high production rate? (y/n/u)	U
Is any drinking water well located between the site and other wells that are suspected to be exposed to a hazardous substance? (y/n/u)	U
Does analytical or circumstantial evidence suggest contamination at a drinking water well? (y/n/u)	N
Does any drinking water well warrant sampling? (y/n/u)	Y

Other criteria? (y/n) Y

PRIMARY TARGET(S) IDENTIFIED? (y/n) N

Summarize the rationale for Primary Targets:

Private wells serve residences near the site. Down gradient wells may not exist, but if they do, they should be sampled.
The onsite well is not used for drinking.

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Decatur Barding and Spawr Landfill - 12/22/92

Page: 4

GROUND WATER PATHWAY SCORESHEETS

Pathway Characteristics

		Ref.
Do you suspect a release? (y/n)	Yes
Is the site located in karst terrain? (y/n)	No	2
Depth to aquifer (feet):	40	1
Distance to the nearest drinking water well (feet):	400	1

LIKELIHOOD OF RELEASE	Suspected Release	No Suspected Release	References
1. SUSPECTED RELEASE	550
2. NO SUSPECTED RELEASE	0	
LR =	550	0	

Targets

TARGETS	Suspected Release	No Suspected Release	References
3. PRIMARY TARGET POPULATION 0 person(s)	0
4. SECONDARY TARGET POPULATION Are any wells part of a blended system? (y/n) N	21	0	
5. NEAREST WELL	20	0	
6. WELLHEAD PROTECTION AREA None within 4 Miles	0	0	
7. RESOURCES	5	0	
T =	46	0

WASTE CHARACTERISTICS

WC =

32	0
----	---

GROUND WATER PATHWAY SCORE:

10

PA-Score 2.1 Scoresheets
Decatur Barding and Spawr Landfill - 12/22/92

Page: 5

Ground Water Target Populations

Primary Target Population Drinking Water Well ID	Dist. (miles)	Population Served	Reference	Value
None				
*** Note : Maximum of 5 Wells Are Printed ***				Total

Secondary Target Population Distance Categories	Population Served	Reference	Value
0 to 1/4 mile	23	2	2
Greater than 1/4 to 1/2 mile	46	2	3
Greater than 1/2 to 1 mile	60	2	2
Greater than 1 to 2 miles	160	2	3
Greater than 2 to 3 miles	400	2	7
Greater than 3 to 4 miles	800	2	4
Total			21

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Decatur Barding and Spawr Landfill - 12/22/92

Page: 6

Apportionment Documentation for a Blended System

There is no known municipal well within 4 miles of the site.

Ref: 6

Surface Water Pathway Criteria List -
Suspected Release

Is surface water nearby? (y/n/u)	Y
Is waste quantity particularly large? (y/n/u)	Y
Is the drainage area large? (y/n/u)	Y
Is rainfall heavy? (y/n/u)	N
Is the infiltration rate low? (y/n/u)	U
Are sources poorly contained or prone to runoff or flooding? (y/n/u)	Y
Is a runoff route well defined(e.g.ditch/channel to surf.water)? (y/n/u)	Y
Is vegetation stressed along the probable runoff path? (y/n/u)	U
Are sediments or water unnaturally discolored? (y/n/u)	U
Is wildlife unnaturally absent? (y/n/u)	U
Has deposition of waste into surface water been observed? (y/n/u)	N
Is ground water discharge to surface water likely? (y/n/u)	Y
Does analytical/circumstantial evidence suggest S.W. contam? (y/n/u)	Y

Other criteria? (y/n) Y

SUSPECTED RELEASE? (y/n) Y

Summarize the rationale for Suspected Release:

Leachate was observed by IEPA during the Preliminary Assessment running into the river. Site surface runoff drains to the river. The runoff may also be contaminated from exposed wastes and leachate. Groundwater probably discharges to the river. There are no drinking water intakes within the 15-mile downstream distance limit.

Surface Water Pathway Criteria List
Primary Targets

Is any target nearby? (y/n/u) If yes: Y
 N Drinking water intake
 Y Fishery
 Y Sensitive environment

Has any intake, fishery, or recreational area been closed? (y/n/u) N

Does analytical or circumstantial evidence suggest surface water
 contamination at or downstream of a target? (y/n/u) Y

Does any target warrant sampling? (y/n/u) If yes: Y
 N Drinking water intake
 Y Fishery
 Y Sensitive environment

Other criteria? (y/n) N

PRIMARY INTAKE(S) IDENTIFIED? (y/n) N

Summarize the rationale for Primary Intakes:

There are no drinking water intakes within the 15-mile
downstream target distance limit.

Ref: 1
continued -----

continued -----

Other criteria? (y/n) N

PRIMARY FISHERY(IES) IDENTIFIED? (y/n) Y

Summarize the rationale for Primary Fisheries:

Other criteria? (y/n) N

PRIMARY SENSITIVE ENVIRONMENT(S) IDENTIFIED? (y/n) Y

Summarize the rationale for Primary Sensitive Environments:

The landfill is next to the Sangamon River. Wetlands are identified along

Ref: 3

SURFACE WATER PATHWAY SCORESHEETS

Pathway Characteristics

Pathway Characteristics			Ref.
Do you suspect a release? (y/n)	Yes	[Grid]	
Distance to surface water (feet):	0	1	
Flood frequency (years):	1-10	1	
What is the downstream distance (miles) to:			
a. the nearest drinking water intake?	N.A.	5	
b. the nearest fishery?	0.0	2	
c. the nearest sensitive environment?	0.0	2	
LIKELIHOOD OF RELEASE	Suspected Release	No Suspected Release	References
1. SUSPECTED RELEASE	550	[Grid]	[Grid]
2. NO SUSPECTED RELEASE	[Grid]	0	
LR =	550	0	

PA-Score 2.1 Scoresheets
Decatur Barding and Spawr Landfill - 12/22/92

Page: 11

Drinking Water Threat Targets

TARGETS	Suspected Release	No Suspected Release	References
3. Determine the water body type, flow (if applicable), and number of people served by each drinking water intake.			
4. PRIMARY TARGET POPULATION 0 person(s)	0		
5. SECONDARY TARGET POPULATION Are any intakes part of a blended system? (y/n): N	0	0	
6. NEAREST INTAKE	0	0	
7. RESOURCES	5	0	
T =	5	0	

Drinking Water Threat Target Populations

Intake Name	Primary (y/n)	Water Body Type/Flow	Population Served	Ref.	Value
None					
Total Primary Target Population Value					0
Total Secondary Target Population Value					0

*** Note : Maximum of 6 Intakes Are Printed ***

Apportionment Documentation for a Blended System

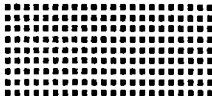
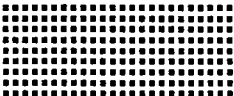
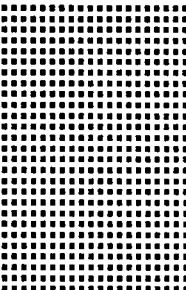

There are no known intakes on the Sangamon River within 15 miles downstream from the site.

Ref: 5

PA-Score 2.1 Scoresheets
Decatur Barding and Spawr Landfill - 12/22/92

Page: 13

Human Food Chain Threat Targets

TARGETS	Suspected Release	No Suspected Release	References
8. Determine the water body type and flow for each fishery within the target limit.			
9. PRIMARY FISHERIES	300		
10. SECONDARY FISHERIES	0	0	
T =	300	0	

Human Food Chain Threat Targets

Fishery Name	Primary (y/n)	Water Body Type/Flow	Ref.	Value
1 Sangamon River	Y	primary fishery	1	300
Total Primary Fisheries Value				300
Total Secondary Fisheries Value				0

*** Note : Maximum of 6 Fisheries Are Printed ***

PA-Score 2.1 Scoresheets
Decatur Barding and Spawr Landfill - 12/22/92

Page: 14

Environmental Threat Targets

TARGETS	Suspected Release	No Suspected Release	References
11. Determine the water body type and flow (if applicable) for each sensitive environment.			
12. PRIMARY SENSITIVE ENVIRONMENTS	300		
13. SECONDARY SENSITIVE ENVIRONS.	0	0	
T =	300	0	

Environmental Threat Targets

Sensitive Environment Name	Primary (y/n)	Water Body Type/Flow	Ref.	Value
1 wetlands	Y	primary sens. envir.	3	300
Total Primary Sensitive Environments Value				300
Total Secondary Sensitive Environments Value				0
*** Note: Maximum of 6 Sensitive Environments Are Printed ***				

PA-Score 2.1 Scoresheets
Decatur Barding and Spawr Landfill - 12/22/92

Page: 15

Surface Water Pathway Threat Scores

Threat	Likelihood of Release (LR) Score	Targets (T) Score	Pathway Waste Characteristics (WC) Score	Threat Score $\text{LR} \times \text{T} \times \text{WC} / 82,500$
Drinking Water	550	5	32	1
Human Food Chain	550	300	32	64
Environmental	550	300	32	60

SURFACE WATER PATHWAY SCORE:

100

Soil Exposure Pathway Criteria List
Resident Population

Is any residence, school, or daycare facility on or within 200 feet of an area of suspected contamination? (y/n/u)	Y
Is any residence, school, or daycare facility located on adjacent land previously owned or leased by the site owner/operator? (y/n/u)	N
Is there a migration route that might spread hazardous substances near residences, schools, or daycare facilities? (y/n/u)	Y
Have onsite or adjacent residents or students reported adverse health effects, exclusive of apparent drinking water or air contamination problems? (y/n/u)	N
Does any neighboring property warrant sampling? (y/n/u)	U

Other criteria? (y/n) N

RESIDENT POPULATION IDENTIFIED? (y/n) Y

Summarize the rationale for Resident Population:

PA-Score 2.1 Scoresheets
Decatur Barding and Spawr Landfill - 12/22/92

Page: 17

SOIL EXPOSURE PATHWAY SCORESHEETS

Pathway Characteristics

		Ref.
Do any people live on or within 200 ft of areas of suspected contamination? (y/n)	Yes	2
Do any people attend school or daycare on or within 200 ft of areas of suspected contamination? (y/n)	No	2
Is the facility active? (y/n):	No	1

LIKELIHOOD OF EXPOSURE	Suspected Contamination	References
1. SUSPECTED CONTAMINATION LE =	550

Targets

2. RESIDENT POPULATION 23 resident(s) 0 school/daycare student(s)	0 2 2
3. RESIDENT INDIVIDUAL	0
4. WORKERS None	0 1
5. TERRES. SENSITIVE ENVIRONMENTS	0
6. RESOURCES	0
T =	0

WASTE CHARACTERISTICS

WC =

32

RESIDENT POPULATION THREAT SCORE:

61

NEARBY POPULATION THREAT SCORE:

1

Population Within 1 Mile: 1 - 10,000

SOIL EXPOSURE PATHWAY SCORE:

62

PA-Score 2.1 Scoresheets
Decatur Barding and Spawr Landfill - 12/22/92

Page: 18

Soil Exposure Pathway Terrestrial Sensitive Environments

Terrestrial Sensitive Environment Name	Reference	Value
None		
Total Terrestrial Sensitive Environments Value		
*** Note : Maximum of 7 Sensitive Environments Are Printed ***		

Air Pathway Criteria List
Suspected Release

Are odors currently reported? (y/n/u) N

Has release of a hazardous substance to the air
been directly observed? (y/n/u) U

Are there reports of adverse health effects (e.g., headaches,
nausea, dizziness) potentially resulting from migration
of hazardous substances through the air? (y/n/u) U

Does analytical/circumstantial evidence suggest release to air? (y/n/u) N

Other criteria? (y/n) N

SUSPECTED RELEASE? (y/n) N

Summarize the rationale for Suspected Release:

No release to the air pathway is suspected.

Ref: 1

PA-Score 2.1 Scoresheets
Decatur Barding and Spawr Landfill - 12/22/92

Page: 20

AIR PATHWAY SCORESHEETS

Pathway Characteristics

Do you suspect a release? (y/n)			No	Ref.
Distance to the nearest individual (feet):			0	
LIKELIHOOD OF RELEASE	Suspected Release	No Suspected Release	References	
1. SUSPECTED RELEASE	0			
2. NO SUSPECTED RELEASE		500		
LR =		0		

Targets

TARGETS	Suspected Release	No Suspected Release	References
3. PRIMARY TARGET POPULATION 0 person(s)	0		
4. SECONDARY TARGET POPULATION	0	13	
5. NEAREST INDIVIDUAL	0	20	
6. PRIMARY SENSITIVE ENVIRONS.	0		
7. SECONDARY SENSITIVE ENVIRONS.	0	6	
8. RESOURCES	0	5	
T =	0	44	

WASTE CHARACTERISTICS

WC =

0	32
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AIR PATHWAY SCORE:

9

PA-Score 2.1 Scoresheets
Decatur Barding and Spawr Landfill - 12/22/92

Page: 21

Air Pathway Secondary Target Populations

Distance Categories	Population	References	Value
Onsite	5	2	1
Greater than 0 to 1/4 mile	23	2	1
Greater than 1/4 to 1/2 mile	115	2,4	1
Greater than 1/2 to 1 mile	600	2,4	1
Greater than 1 to 2 miles	1200	2,4	1
Greater than 2 to 3 miles	6000	2,4	1
Greater than 3 to 4 miles	50000	2,4	7
Total Secondary Population Value			13

PA-Score 2.1 Scoresheets
Decatur Barding and Spawr Landfill - 12/22/92

Page: 22

Air Pathway Primary Sensitive Environments

Sensitive Environment Name	Reference	Value
None		
Total Primary Sensitive Environments Value		

*** Note : Maximum of 7 Sensitive Environments Are Printed***

Air Pathway Secondary Sensitive Environments

Sensitive Environment Name	Distance	Reference	Value
1 wetlands	onsite	3	2.5
2 Rock Springs Center	0 - 1/4	2	1.9
3 wetlands	0 - 1/4	3	1.9
Total Secondary Sensitive Environments Value			6

Air Pathway Primary Sensitive Environments

Sensitive Environment Name	Reference	Value
None		
Total Primary Sensitive Environments Value		

*** Note : Maximum of 7 Sensitive Environments Are Printed***

Air Pathway Secondary Sensitive Environments

Sensitive Environment Name	Distance	Reference	Value
1 wetlands	onsite	3	2.5
2 Rock Springs Center	0 - 1/4	2	1.9
3 wetlands	0 - 1/4	3	1.9
Total Secondary Sensitive Environments Value			6

PA-Score 2.1 Scoresheets
Decatur Barding and Spawr Landfill - 12/22/92

Page: 23

SITE SCORE CALCULATION

SITE SCORE CALCULATION	SCORE
GROUND WATER PATHWAY SCORE:	10
SURFACE WATER PATHWAY SCORE:	100
SOIL EXPOSURE PATHWAY SCORE:	62
AIR PATHWAY SCORE:	9
SITE SCORE:	59

SUMMARY

1. Is there a high possibility of a threat to any nearby drinking water well(s) by migration of a hazardous substance in ground water? No

If yes, identify the well(s).

If yes, how many people are served by the threatened well(s)? 0

2. Is there a high possibility of a threat to any of the following by hazardous substance migration in surface water?
- | | |
|--|-----|
| A. Drinking water intake | No |
| B. Fishery | Yes |
| C. Sensitive environment (wetland, critical habitat, others) | Yes |

If yes, identify the target(s).
Sangamon River and associated sensitive environments.

3. Is there a high possibility of an area of surficial contamination within 200 feet of any residence, school, or daycare facility? Yes

If yes, identify the properties and estimate the associated population(s)
Lynch residence, 10 persons estimated

4. Are there public health concerns at this site that are not addressed by PA scoring considerations? No

If yes, explain:

REFERENCE LIST

1. CERCLA Preliminary Assessment Report, Illinois Environmental Protection Agency, Decatur Barding and Spawr Landfill, February 3, 1989
2. USGS Topographic Maps, Harristown quadrangle
Decatur quadrangle
3. US Department of the Interior, Wetlands Inventory Maps
Harristown, Decatur
4. 1990 Census of Population and Housing, Summary Population and Housing Characteristics, Illinois. U.S. Department of Commerce. August 1991
5. Illinois Environmental Protection Agency, Department of Public Water Supplies, List of Public and Food Processing Water Supplies Utilizing Surface Water, July, 1983
6. Illinois Environmental Protection Agency, Division of Public Water Supplies County/Regional